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REPLY

The Examiner indicated that new claim 41 was withdrawn from consideration as being directed to a non-elected invention. The Examiner's withdrawal of claim 41 is respectfully traversed. In the Amendment and Reply filed February 25, 2008, in response to the Examiner's restriction requirement, the Applicant elected Group VI, claim 34 drawn to a pre-dosed dental desensitizing system, and species E, Fig. 15. Claim 41 reads on the elected species E, Fig. 15. Therefore, claim 41 is believed to be properly within this application, and is not directed to a non-elected invention.

The Examiner rejected claims 34, 39-40 under 35 USC §112, first paragraph, due to lack of an adequate support in the specification for the recited non-absorbent flock material. The Examiner also indicated there is no disclosure of the applicators being unattached to the sealed package so that the applicator is readily removable.

Claims 34 has been amended to remove the objected to "non-absorbent" recitation in the claim.

The Examiner's rejection to claims 39-40 under 35 USC §112, first paragraph, is respectfully traversed. There is sufficient support in the specification for the recited language in claims 39-40 that, the applicator is placed within the second chamber "...so as to be unattached to said sealed package, whereby said

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second applicator is readily removable from said sealed package..." The specification on page 19, lines 1-8 states, "The applicators 510A and 510B are initially sealed within the multi-chambered package 528 by closing over flaps 534 and 535. Prior to use and reactivation of the dried first and second material on the first and second applicator end portions 518A and 518B, the multi-chambered package 528 is opened by separating the flaps 534 and 535. The applicators 510A and 510B can then be removed." Therefore, from the specification as a whole in light of this specific language that once the multi-chamber package is opened the applicators can then be removed it should be clear that the applicator is unattached to the sealed package, whereby the applicator is readily removable from the sealed package as claimed.

The Examiner rejected claims 34, and 38-40 under 35 USC §103(a) as being unpatentable over Smith et al (5,470,323) in view of Hack et al (5,874,066) and Discko (6,049,934).

Smith et al discloses a package system with tandem applicator pads for topical drug delivery. Two applicator pads 20, 22 are attached to the surface of a support sheet 14. A seal 34 may be provided between pads 20 and 22 in order to divide the compartment into two sub-compartments. The applicator pads 20 and 22 are arranged in a separated array on a support sheet 14. Each

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pad contains at least one active ingredient, preferably in combination with a suitable carrier vehicle.

Hack et al discloses a treatment for tooth hypersensitivity comprising a two-step method using a first solution of calcium or strontium salt and a second solution of a potassium oxalate.

Discko discloses a disposable dental applicator.

The present invention relates to a pre-dosed dental desensitizing system that is sealed in a package with first and second applicators that are pre-dosed with a dry, inactive dental desensitizer. In the present invention, the dental desensitizer material is coated and dried on the exterior of the fibers of the flock material. This results in no expansion during reactivation, and the reactivation being accomplished much more quickly. The dental desensitizer material is also more completely dispensed. Because the dental desensitizer material is coated on the fibers of the flock material, the reactivation is quicker. The material is also dispensed more completely from the surface of the flock material with less material being retained that is not accessible.

The packaging system disclosed in Smith uses pads for topical drug delivery, and could not be adapted for delivery of a dental desensitizer in the small confines of a patient's mouth. Accordingly, the present invention is not formed by the teachings of Smith et al and Hack et al in that neither of these

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references, even if combined, would form the present invention as claimed, in that a dry and inactive desensitizer material is placed on and coats a flock material on the applicator end portion. Accordingly, the present invention makes possible the use of a sealed package that does not require the structural integrity needed to contain a liquid or a moist applicator as disclosed in Smith et al. Smith et al specifically discloses a coating to provide a nonporous gas and/or vapor barrier. (Smith et al, Column 7, lines 9-12) The present invention in reciting a dry inactive material or desensitizing agent dried on and coating the flock material does not require the additional complication or cost of a coating to provide a nonporous gas and/or vapor barrier as disclosed in Smith et al.

Diskco discloses a disposable dental applicator for applying a material. However, the applicator disclosed in Diskco is not pre-dosed with a desensitizing agent dried on and coating flock material as claimed in the present application. There is no suggestion or motivation, and it would not have been obvious, to provide a desensitizing agent dried on and coating a flock material as claimed. Simply, indicating that there exists a dental desensitizer, an applicator, and a packaging for an applicator pad does not render obvious the claimed invention with a desensitizing agent dried on and coating the flock material. While the invention may be relatively simple, there is simply no

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disclosure which would result, without more, in the combination as advocated by the Examiner. The Examiner applying bits and pieces from the prior art is using impermissible hindsight in an effort to reconstruct the present invention. The present invention, as claimed, provides an improved device for conveniently delivering a multi-part dental desensitizer that makes delivering dental services easier.

Claim 39 recites that the first applicator is placed in the first chamber so as to be unattached to the sealed package and is readily removable from the sealed package. Smith et al teaches that the applicator pads are attached to the surface of the support sheet 14, therefore the packaging system disclosed in Smith et al would not be applicable to an applicator having an elongated handle that is unattached to the sealed package as recited in amended claim 39. Additionally, because the applicator pads disclosed in Smith et al are attached to the surface of the support sheet 14, the relatively large pads could not be used in the small confines of a patient's mouth.

Claim 41 more particularly defines an embodiment of the invention. claim 41 recites more precisely and specifically the structure of the multi-chamber package and the unique applicator with flock material having the dehydrated dental desensitizer dried and coated thereon, as illustrated in Fig. 15. The embodiment or species illustrated in Fig. 15 was originally

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elected in response to a restriction requirement and therefore, should properly be maintained in this application.

The inventor has discovered that by using a flock material that is coated with a dried or dehydrated dental desensitizer material provides an improved applicator for the treatment of dental hypersensitivity. The use of a flock material results in an improved applicator for delivering a multi-part dental desensitizer material. Therefore, the present invention is an improvement over the prior art. The present invention is something more than simply a soaked pad as disclosed in Smith et al. The use of a flock material has been discovered to be particularly advantageous in holding the dried or dehydrated dental desensitizer within and coated on the fibers of the flock material, and yet facilitates rapid reactivation and placement on a tooth to aid in the treatment of dental hypersensitivity. The pads disclosed in Smith et al would be of little to no benefit in a dental procedure performed in the tight confines of a patient's mouth. The present invention, as recited in the claims, recites a flock material that does not trap the dry inactive material thereon internally, but externally on the multiple fibers of the flock material which greatly facilitates its reactivation and application on a tooth. Accordingly, much more material may be transferred from the flocked applicator to the tooth quickly and with very little waste of material. The present invention, in

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utilizing a flock material, is an improvement over the pad disclosed in Smith et al that is soaked with a moist active dermatological agent. This combination of a flock material and dried inactive dental desensitizer in and coated on the flock material to form an improved applicator would not have been obvious in view of the references cited.

Accordingly, it is requested that the Examiner enter this Amendment and Reply, reconsider the present application, and indicate allowable subject matter.

Respectfully submitted,



Paul A. Fattibene
Attorney for Assignee
Reg. No. 31,694

2480 Post Road
Southport, CT 06890
Tel. (203)255-4400
Fax (203)259-0033

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